

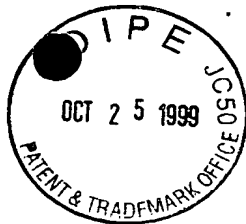


-5-

PATENT

Sheet 1 of 3

FORM PTO-1449 (Modified) (Rev. 7-80)		U.S. Dept. of Commerce Patent and Trademark Office		Atty Docket No. CGAB-210 USA		Appln. No. 09/367,013	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicant(s) DEBORAH KNUTZON ET AL.			
				Filing Date August 5, 1999		Group 1714	
U.S. PATENT DOCUMENTS							
*Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
we	AA	3,649,295	03/14/1972	BERNHART	99	57	06/01/1970
we	AB	5,614,400	03/25/1997	CAHOON ET AL.	435	172.3	10/05/1995
we	AC	4,670,285	06/02/1987	CLANDININ ET AL.	426	602	03/14/1985
we	AD	4,920,098	04/24/1990	COTTER ET AL.	514	2	08/28/1989
we	AE	5,545,553	08/13/1996	GOTSCHLICH	435	252.33	09/26/1994
we	AF	5,443,974	08/22/1995	HITZ ET AL.	435	172.3	12/11/1992
we	AG	4,526,793	07/02/1985	INGENBLEEK ET AL.	426	72	04/06/1983
we	AH	5,376,541	12/27/1994	KAWASHIMA ET AL.	435	136	09/29/1992
we	AI	5,550,156	08/27/1996	KYLE	514	547	12/19/1994
we	AJ	5,374,657	12/20/1994	KYLE	514	547	09/14/1992
we	AK	5,407,957	04/18/1995	KYLE ET AL.	514	547	02/13/1990
we	AL	5,492,938	02/20/1996	KYLE ET AL.	514	786	02/09/1995
we	AM	5,057,419	10/15/1991	MARTIN ET AL.	435	134	09/22/1988
we	AN	4,526,902	07/02/1985	RUBIN	514	560	10/24/1983
we	AO	4,843,095	06/27/1989	RUBIN	514	558	08/07/1987
we	AP	4,614,663	09/30/1986	RULE	426	601	05/03/1985
we	AQ	5,552,306	09/03/1996	THOMAS ET AL.	435	134	09/14/1994
we	AR	5,614,393	03/25/1997	THOMAS ET AL.	435	134	12/30/1994
we	AS	4,938,984	07/03/1990	TRAITLER ET AL.	426	580	05/05/1989
we	AT	5,512,482	04/30/1996	VOELKER ET AL.	435	320.1	01/22/1992
we	AU	4,058,594	11/15/1977	WILLIAMS	424	37	08/10/1976
Examiner <i>N. A. Hed</i>				Date Considered <i>10/9/01</i>			
* Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

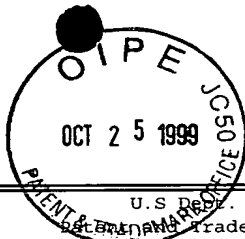


PATENT

- 6 -

Sheet 2 of 3

FORM PTO-1449 (Modified) (Rev. 7-80)		U.S. Dept. of Commerce Patent and Trademark Office		Atty Docket No. CGAB-210 USA		Appln. No. 09/367,013	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicant DEBORAH KNUTZON ET AL.			
				Filing Date August 5, 1999		Group 1714	
U.S. PATENT DOCUMENTS							
*Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
FOREIGN PATENT DOCUMENTS							
*Examiner Initials		Document Number	Date	Country	Class	Subclass	Translation YES NO
ME	AV	WO 96/10086	04/04/1996	PCT	C12N	15/54	
ME	AW	WO 93/06712	04/15/1993	PCT	A01H	2/00	
ME	AX	WO 96/21022	07/11/1996	PCT	C13N	15/53	
ME	AY	WO 94/18337	08/18/1994	PCT	C13N	15/02	
ME	AZ	WO 97/30582	08/28/1997	PCT	A01H	5/00	
ME	BA	0561569 A2	09/22/1993	EP	C12N	15/82	
ME	BB	WO 93/11245	06/10/1993	WO	C12N	15/53	
ME	BC	WO 96/13591	05/09/1996	WO	C12N	15/53	
ME	BD	WO 94/11516	05/26/1994	WO	C12N	15/53	
OTHER DOCUMENTS							
ME	BE	Ackman, "Problems in Fish Oils and Concentrates," Canadian Institute of Fisheries Technology, Technical University of Nova Scotia, 189-204					
ME	BF	Bajpai and Bajpai, "Arachidonic Acid Production by Microorganisms," Biotechnology and Applied Biochemistry 15:1-10 (1992)					
ME	BG	Gurr, "Alpha or Gamma: What's a Double Bond Position Between Friends?" 1. Gamma-lipolenic Acid," Lipid Technology (March 1995).					
ME	BH	Hodgson, "Advances in Vector Systems for Gene Therapy," Ex. Opin. Ther. Patents 5(5):459-468 (1995)					
ME	BI	Horrobin, "Medical Roles of Metabolites of Precursor EFA," INFORM 6(4):428-434 (April 1995)					
Examiner N. Ahmed				Date Considered 10/9/01			
* Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							



-7-

PATENT

Sheet 3 of 3

FORM PTO-1449 (Modified) (Rev. 7-80)		U.S. Dept. of Commerce Patent & Trademark Office	Atty Docket No. CGAB-210 USA	Appln. No. 09/367,013
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)			Applicant DEBORAH KNUTZON ET AL.	
			Filing Date August 5, 1999	Group 1714
OTHER DOCUMENTS				
ME	BJ	Murata et al., "Biosynthesis of gamma-Linolenic Acid in the Cyanobacterium <i>Spirulina platensis</i> ," In: gamma-Linolenic Acid Metabolism and Its Roles in Nutrition and Medicine (Huang and Mills, eds.), pp. 22-32, Access Press, Champaign, IL		
ME	BK	Ratlidge, "Single cell oils-have they a biotechnological future?" MB Tech. 11 (July 1995)		
ME	BL	Reddy and Thomas, "Expression of a cyanobacterial Δ^6 -desaturase gene results in gamma-linolenic Acid Production in Transgenic Plants," Nature Biotechnology 14:639-642 (May 1996).		
ME	BM	Ward, "Microbial Production of long-chain PUFAs," INFORM 6(6):683-688 (June 1995).		
ME	BN	"Closer to Mother's Milk", the Gist 61:8-9 (Spring 1995).		
ME	BO	"Exciting Prospects for Stearidonic Acid Seed Oils," Lipid Technology (November 1996).		
ME	BP	Covello, P. et al., "Functional Expression of the Extraplastidial Arabidopsis <i>Thaliana</i> Oleate Desaturase Gene (FAD2) in <i>Saccharomyces Cerevisiae</i> ," Plant Physiology, Vol. 111, No. 1, pp. 223-226, (1996).		
ME	BQ	PCT International Search Report		
Examiner		Date Considered		
N. Steel		10/9/01		
* Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.				

RECEIVED
OCT 27 1999
TO 1100 MAIL ROOM

PATENT

- 6 -

Sheet 1 of 1

FORM PTO-1449 (Modified) (Rev. 7-80)		U.S. Dept. of Commerce Patent and Trademark Office		Atty Docket No. CGAB-210 USA (Abbott Docket No. 6283.US.01)		Appln. No. 09/367,013	
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicant(s) DEBORAH KNUTZON ET AL.			
				Filing Date August 5, 1999		Group 1714	
U.S. PATENT DOCUMENTS							
*Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
	AA						
	AB						
FOREIGN PATENT DOCUMENTS							
*Examiner Initials		Document Number	Date	Country	Class	Subclass	Translation YES NO
we	AC	WO 96/21037	7/11/96	PCT	E12P	7/40	x
OTHER DOCUMENTS							
we	AD	L.V. Michaelson, et al., "Isolation of a Δ^5 -Fatty Acid Desaturase Gene from Mortierella alpina", Journal of Biological Chemistry, American Society of Biological Chemists, Vol. 273, No. 30, July 24, 1998, pp. 19055-19059 (XP-002076636)					
we	AE	Deborah S. Knutzon, et al., "Identification of Δ^5 -Desaturase from Mortierella alpina by Heterologous Expression in Bakers' Yeast and Canola", Journal of Biological Chemistry, American Society of Biological Chemists, Vol. 273, no. 45, November 6, 1998, pp. 29360-29366 (XP-002106760)					
Examiner N. Theed				Date Considered 10/9/01			
* Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							